

The opinion in support of the decision being entered today  
is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* WILLIAM R. KENNEDY and JOHN M. KENNEDY

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Appeal 2007-0119  
Application 10/706,190  
Technology Center 3600

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Decided: August 27, 2007

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Before TERRY J. OWENS, MURRIEL E. CRAWFORD, and LINDA E.  
HORNER, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

The Appellants appeal from a rejection of claims 1-3, 12-16 and 28-34.  
Claims 4-11, 17 and 18 stand objected to as dependent from a rejected claim but  
allowable if rewritten in independent form, and claims 19-27 stand allowed.

## THE INVENTION

The Appellants claim 1) a mine stopping door system, 2) a mine stopping in combination with the mine stopping door system, and 3) a method of using that combination's door. Claim 28, which claims the mine stopping door system, is illustrative:

28. A door system for closing a doorway in a mine stopping, said door system comprising:  
a door frame including a first frame member and a second frame member;  
a door hingedly mounted on the first frame member for swinging relative to the stopping between a closed position and an open position swung outwardly away from the stopping;  
a keeper disposed on the second frame member; and  
a trigger-actuated latch mechanism including a detent engageable with the keeper for latching the door in its closed position and a trigger operably connected to the detent in a latched position, the detent in the latched position being biased toward an unlatched position, the mechanism being constructed and configured so that actuation of the trigger causes the detent to move from the latched position in which the detent engages the keeper for latching the door closed to the unlatched position in which the detent is disengaged from the keeper for allowing the door to be opened.

## THE REFERENCES

|         |              |               |
|---------|--------------|---------------|
| Landis  | US 2,804,329 | Aug. 27, 1957 |
| Kennedy | US 4,082,331 | Apr. 4, 1978  |
| Clavin  | US 5,638,709 | Jun. 17, 1997 |

### THE REJECTIONS

The claims stand rejected as follows: claims 28-34 under 35 U.S.C. § 102(b) as anticipated by Landis; claims 1, 12 and 13 under 35 U.S.C. § 103 as obvious over Landis in view of Kennedy; and claims 1-3 and 14-16 under 35 U.S.C. § 103 as obvious over Clavin in view of Kennedy.

### OPINION

The rejection under 35 U.S.C. § 102(b) over Landis is affirmed as to claims 28-30, 32 and 34, and reversed as to claims 31 and 33. The rejections under 35 U.S.C. § 103 over Landis in view of Kennedy and over Clavin in view of Kennedy are reversed.

#### Rejection under 35 U.S.C. § 102(b) over Landis

##### Claims 28 and 30

Landis discloses a latch for an interior door such as a clothes closet door (col. 1, ll. 15-17). The latch has, mounted on each side of a hole through the door, a handle (4, 5) having a push button (6, 7) on its end (col. 1, ll. 55-62; fig. 1). A flat strip main spring (9) extends through the handle between the push buttons (col. 1, ll. 62-66; fig. 1). Inside the handle, perpendicular to the handle's axis, is a plunger tube (11) that contains a plunger (24) and has an end plate (12) (col. 1, ll. 67-69; col. 2, ll. 14-15). The end plate is opposite to a jamb plate (25) in a door jamb (26) (col. 2, ll. 14-17). The main spring presses against one end of the plunger to force the opposite end of the plunger through a hole in the jamb plate into an opening in the door jamb (col. 2, ll. 14-17; fig. 1). A secondary or auxiliary spring (28) on the side of the plunger tube's end plate opposite the jamb plate

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presses against a shoulder (29) in the plunger to urge the plunger inwardly toward the latch releasing position (col. 2, ll. 17-20). “The main spring 9, however, engages the inner end of the plunger and since the main spring is of greater strength than spring 28 it forces the plunger into latching position counter to the action of the spring 28” (col. 2, ll. 20-24). The latch is opened by pressing one of the buttons, thereby causing “the main spring 9 to bow further in a direction away from the plunger thereby releasing the plunger for movement by the auxiliary spring 28 the plunger being thereby forced inwardly, following the bowing of the main spring, to latch releasing position” (col. 2, ll. 27-32). “As soon as the push button is released, the main spring 9 tends to straighten and thereby force the plunger back toward latching position counter to the action of the auxiliary spring 28” (col. 2, ll. 32-36).

The Examiner argues that Landis’s plunger corresponds to the Appellants’ detent and that Landis’s jamb plate corresponds to the Appellants’ keeper (Answer 3-4).

The Appellants argue that in the latched position Landis’s secondary spring (28) does not bias the plunger in the unlatched position because the stronger main spring (9), acting in the opposite direction, negates any biasing force of the secondary spring (Br. 17-18). The Appellants argue that “[i]f the Landis plunger was biased toward the unlatched position when it is in the latched position as asserted by the Examiner, the Landis latch would not be able to stay latched” (Reply Br. 2). The Appellants’ arguments are not well taken because the bias of the Appellants’ detent toward the unlatched position when in the latched position

does not prevent the door from staying latched. Like Landis, the Appellants have a stronger spring (coil spring 115) that holds the detent in its latched position (Spec. 9:0030; fig. 3).

We therefore are not convinced of reversible error in the rejection of claims 28 and 30.

#### Claim 29

Claim 29, which depends from claim 28, requires that “the first frame member is in opposed relation to the second frame member.”

The Appellants argue: “Landis fails to teach, explicitly or inherently, that the first frame member is necessarily in opposed relation to the second frame member. It is possible that the ‘inherent’ first frame member of Landis is adjacent door jamb 26” (Br. 18-19). The Appellants’ claim 28 requires that the door is hingedly mounted on the first frame member. Landis’s door swings toward and away from door jamb 26 in figure 1 and, therefore, is hingedly mounted on the frame member (first frame member) opposite the door jamb (second frame member).

Hence, we are not persuaded of reversible error in the rejection of claim 29.

#### Claim 32

Independent claim 32 requires “a detent engageable with the keeper for latching the door in its closed position even during movement of the keeper relative to the door”.

The Appellants argue that “movement of the [Landis’s] jamb plate 25 relative to the door 1 would prevent the plunger 24 from engaging with jamb plate 25 for keeping the door 1 latched closed. Instead, the jamb plate 25 and plunger 24

would be misaligned thereby rendering the latch inoperable” (Br. 22). The Appellants argue that “the latch mechanism 50 of this [the Appellants’] invention has been designed so that it will remain in tight latching engagement with the keeper 57 even though there is a significant change in the position of the keeper.” *See id.* The Appellants’ claim 32 does not require a significant change in the position of the keeper. That claim merely requires movement of the keeper relative to the door. As shown in Landis’s figure 1, the jamb plate can be moved to the right relative to the door without the plunger becoming disengaged from the jamb plate provided that the jamb plate is not moved past the lower end of the plunger.<sup>1</sup>

Hence, we are not persuaded of reversible error in the rejection of claim 32.

#### Claims 31 and 33

Claims 31 and 33, which depend, respectively, from claims 30 and 32, require that “the latch mechanism includes a sear for holding the detent in the latched position and wherein actuation of the trigger causes release of the detent from the sear.”

The Examiner argues that Landis’s plunger 24 is cocked by spring 28, and that Landis’s spring 9 functions as a sear because it maintains the plunger in the cocked position until one of the buttons (6, 7) is actuated (Answer 14). A sear is

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<sup>1</sup> As indicated by the curved portion of jamb plate 25 in Landis’s figure 1, the door opens by rotation in the clockwise direction.

“the catch that holds the hammer of a gunlock at cock or half cock”.<sup>2</sup> The Appellants’ sear is a catch having an outward wall (102) that “prevents pivoting of the detent 51 when the detent is in the cocked position” (Spec. 7:0026; figs. 3, 5A). Landis’s spring 9 is not a catch and, therefore, is not a sear.

Hence, the Examiner has not established a prima facie case of anticipation of the invention claimed in the Appellants’ claims 31 and 33.

#### Claim 34

Independent claim 34 requires “at least one handle mounted on the door, the handle being mounted on the door independent of the trigger.”

The Appellants argue (Br. 23-24) that Landis’s handles are not mounted independently of buttons 6 and 7 because “[p]ush buttons 6 and 7 are received axially within the handles 4 and 5, each push button having a flared inner end 8 adapted to engage the inner flared portion of the handle and thereby limit movement thereof in an outward direction” (col. 1, ll. 58-62). The Appellants’ claim 34 merely requires that the mounting of the handle is independent of the trigger. The claim does not require that the mounting of the handle is independent of the mounting of the trigger. Landis’s handles are mounted using screws 20 and 21 (col. 2, ll. 7-8) regardless of whether the push buttons are present. The features argued by the Appellants, i.e., the receipt in the handles of push buttons having flared inner ends to limit their outward movement, pertain to the mounting of the push buttons, not the mounting of the handles.

Therefore, we are not persuaded of reversible error in the rejection of

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<sup>2</sup> *Webster’s New Collegiate Dictionary* 1042 (G. & C. Merriam 1973).

claim 34.

Rejection under 35 U.S.C. § 103  
over Landis in view of Kennedy

Kennedy discloses a mine stopping door latch (9) comprising a metal bar (11) having a detent portion (15) that engages a lug (17, which corresponds to the Appellants' keeper) (col. 2, ll. 50-52). "Even though the floor of the passage blocked by the stopping 5 may heave up, causing the sill of the doorway 3 to heave up, the door 1 will remain latched, bar 11 being free to swing counterclockwise relative to the door as the sill heaves up to accomodate [sic] the upheaval of the sill relative to the door and the detent portion 15 remaining latched behind the lug" (col. 2, ll. 52-59).

The Examiner argues (Answer 10-11):

The fact that the latch mechanism of Landis is used on a door, to secure a door in a closed position, and to effectuate that opening of the door would enable one having ordinary skill in the art to recognize that such a latch can be used on many doors. The only difference between the claimed mechanism and Landis's latch is that the claimed mechanism is used in conjunction with a door in a mine, while Landis is not. However, nothing in Landis precludes such a use. ... One of ordinary skill in the art would recognize that one known latch may be replaced with another known latch to achieve an identical result.

The Examiner, however, has not provided evidence or technical reasoning which shows that on a mine stopping door, an identical result would be achieved by a mine stopping door latch and a closet door latch. Kennedy discloses that unlatching or jamming of mine stopping doors when mines heave up is a serious



problem (col. 1, ll. 16-23), and that Kennedy's latch solves that problem (col. 2, ll. 52-68). The Examiner argues that Landis's plunger (24) would move vertically up and down, in and out of engagement with Kennedy's lug (17) (Answer 11). Both Kennedy (col. 2, ll. 54-59) and the Appellants (Spec. 10:0031) use a bar having a detent thereon that swings toward a mine stopping door to maintain engagement of the detent with a lug or keeper such that the door remains latched and unjammed after the mine floor heaves up. The Examiner has not established that one of ordinary skill in the art would have expected Landis's latch having a plunger moved up and down by a spring between two push buttons to be effective in keeping a mine stopping door latched and unjammed in that situation. Nor has the Examiner established that one of ordinary skill in the art would have been led to modify Landis's latch to provide it with that capability.

The Examiner, therefore, has not established a prima facie case of obviousness of the Appellants' claimed invention over the combined disclosures of Landis and Kennedy.

Rejection under 35 U.S.C. § 103  
over Clavin in view of Kennedy

Clavin discloses a trigger latch for a door (50) that engages a compression gasket (52) on a door frame (51) (col. 3, ll. 19-23). The latch comprises a housing (11) having a handle (12) and a bolt (13) with an adjustment bolt (37) on its end that engages the side of the door frame opposite the compression gasket (col. 2, ll. 16-17; 57-58). A mounting bracket (35) is attached to the underside of the housing and bears against the inner end of the door on the side of the door

opposite the compression gasket (col. 2, ll. 53-57; fig. 3). A compression spring (34) in a well (32) in the housing biases the handle in the unlatched position (col. 2, ll. 47-53). Downward pressure on a trigger (40) in the housing pivots a trigger portion (54) away from a shoulder (55) of the handle, thereby enabling the compression spring to cause the handle to pop up and the adjustment bolt to swing away from the door frame to unlatch the door (col. 3, ll. 24-28; fig. 1). The latch is closed by closing the door and then pushing downward on the handle to bring the bolt to the latch closed position (col. 3, ll. 31-33).

The Examiner relies upon Clavin's bolt and adjustment bolt as corresponding to the Appellants' detent, and the lower edge of Clavin's door frame as corresponding to the Appellants' keeper (Answer 5).

The Examiner argues, regarding the combination of Clavin and Kennedy, that "[o]ne of ordinary skill in the art would recognize that one known latch may be replaced with another known latch to achieve an identical result" (Answer 8). Clavin is silent as to the environments in which the latch is suitable. The Examiner has not provided evidence or technical reasoning which shows that Clavin's latch would be suitable in a mine stopping door environment. The Examiner argues that "it appears that even if there were some heaving of the surrounding structure, for example, element 51, that the latch may still operate." *Id.* As indicated by the Examiner's "it appears" and "may still operate" language, the Examiner has provided mere speculation, and such speculation is not sufficient for establishing a *prima facie* case of obviousness.

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DECISION

The rejection of claims 28-34 under 35 U.S.C. § 102(b) over Landis is affirmed as to claims 28-30, 32, and 34, and reversed as to claims 31 and 33. The rejections under 35 U.S.C. § 103 of claims 1, 12, and 13 over Landis in view of Kennedy and claims 1-3 and 14-16 over Clavin in view of Kennedy are reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2006).

AFFIRMED-IN-PART

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